

REMARKS

Claims 1-8 are now present in this application.

The abstract and claim 4 have been amended. Claim 8 has been added. Reconsideration of the application, as amended, is respectfully requested.

Claims 1, 2, 4, and 5 have been provisionally rejected by the Examiner on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 9-11 and 13-18 of co-pending application No. 10/488,804. This rejection is respectfully traversed.

As noted on page 3 of the Examiner's Office Action letter, the Examiner indicates that this double patenting rejection is a provisional obviousness-typed double patenting rejection because the conflicting claims have not, in fact been patented. Accordingly, since the conflicting claims of the respective applications have not been patented, it is believed that it is premature to address the double patenting issue at this time. Accordingly, the Examiner is respectfully requested to hold this rejection in abeyance until claims of the respective applications have been allowed.

Claims 1, 2, and 6 have been rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by Japanese patent No. 11-152423. Claims 1, 6 and 7 have been rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by Hieda, US Patent 4,936,913. Claims 1, 6 and 7 have been rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by Booz, US Patent 4,469,282. Claims 1 and 3-5 have been rejected by the Examiner of 35 U.S.C. § 103(a) as being unpatentable over Hieda, US Patent 4,936,913 in view of Bunge et al., US Patent 4,049,610. Claims 1, 3 and 4 have been rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Booz, US Patent 4,469,282 in view of Bunge et al., US Patent 4,049,610. These rejections are respectfully traversed.

The present invention is directed to an aluminum flake pigment having a small average particle diameter as well as high brightness and luminance. More specifically, the average particle diameter of the aluminum flake particles forming the basic particles of the

aluminum flake pigment is preferably in the range of 3 to 20 micrometers, more preferably in the range of 5 to 15 micrometers. The luminance of the coat tends to be insufficient if this average particle diameter is less than 3 micrometers, while glitter of the coat may be undesirably excessively enhanced if this average particle diameter exceeds 20 micrometers. The average value of minimum diameters/maximum diameters of the aluminum flake particles forming the basic particles of the aluminum flake pigment is at least 0.6, and preferably 0.7. If this average value of minimum diameters/maximum diameters is less than 0.6, sufficient luminance cannot be attained. While the upper limit of this average value of minimum diameters/maximum diameters does not matter so far as the same is at least 0.6, the average value does not exceed 1, as a matter of course. It is believed that providing aluminum flake particles having average value of minimum diameters/maximum diameters of at least 0.6 represents one of the important features of the present invention for aluminum flake particles having an average particle diameter within the range of 3 to 20 micrometers.

As the Examiner will note, claim 1 specifically recites that the aluminum flake pigment of the present invention comprises aluminum flakes as basic particles wherein the aluminum flakes have an average particle diameter in the range 3 to 20 micrometers and an average value of minimum diameters/maximum diameters of at least 0.6. All of the remaining claims in the present application, that is, claims 2-8 are dependent from claim 1.

The Examiner, in rejecting various claims as being anticipated by the Japanese patent, the Hieda patent and the Booz patent under 35 U.S.C. § 102 recognizes that none of these prior art references recognizes the importance of providing aluminum flakes having an average particle diameter within the range of 3 to 20 micrometers in conjunction with the ratio that the average value of minimum diameters/maximum diameters is at least 0.6. The Examiner, in attempting to overcome this deficiency in all of these references argues that the claim limitation regarding the average value of minimum diameters/maximum diameters of at least 0.6 is considered inherently encompassed by the prior art references.

The Examiner, when relying on the theory of inherency, must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily follows from the teachings of the applied art. See *Ex Parte Levy*, 17 USPQ 2nd 1461, 1464 (B.D.Pat. App. and Int. 1990). Thus, there can be no speculation or only possibilities involved any holding of inherency. In other words, what is alleged to be inherent must necessarily occur. The mere fact that something may result from a given set of circumstances is not sufficient (see in re Ooelrich, 212 USPQ 323, 326 (CCPA 1991)). Inherent anticipation requires that the missing descriptive material is necessarily present, not merely probably or possibly present in the prior art. It is believed that the Examiner, in relying upon the theory of inherency has not provided a basis in fact or any technical reasoning to support the determination that the ratio of the average value of minimum diameters/maximum diameters of at least 0.6 is encompassed by the prior art references under 35 U.S.C. § 102.

The Examiner appears to take the position that since the Japanese patent discloses an aluminum flake pigment having a mean particle size ranging from 4 to 20 micrometers, that the ratio of average value of minimum diameters/maximum diameters of at least 0.6 must inherently be present thus leading to an aluminum flake pigment possessing high brightness and luminescence. However, such conclusion represents a considerable stretch in logic and fact. As shown in Table 2 on page 18 of the present application, when the average particle diameter of the aluminum flake falls within the range of 3 to 20 micrometers as shown in comparative example 1 and comparative example 2, and when the average value of the minimum diameter to the maximum diameter falls below 0.6, that is 0.57 and 0.52 as shown in comparative example 1 and 2, the film luminescence is 143 and 160, respectively, which is very inferior to the luminescence values of examples 1-6 as shown in Table 2. Similarly, when the average particle diameter of the aluminum flake is outside of the range of 3 to 20 micrometers and the average value of minimum diameters/maximum diameters is less than 0.6, the luminescence of the film is also inferior to examples 1-6 as shown in Table 2 of the present application. Thus, the present invention has demonstrated a particular relationship which is effective in producing enhanced film

luminescence which is not recognized by any of the references relied upon by the Examiner, either alone or in combination.

Method claims 4 and 5 are dependent from claim 1 and, as such, contain all the limitations of claim 1. In addition, claims 4 and 5 include the limitation wherein the grinding spherical media has diameters in the range of 0.3mm to 1.5mm. The Examiner, on page 7 of the Office Action letter recognizes that the Hieda patent does not disclose the employment of grinding media having diameters in the range of 0.5 to 1.5mm as recited in claim 4. Thus to reject claims 4 and 5 as being obvious, the Examiner must again make a leap of faith and conclude that it would be obvious to modify the teachings of the Hieda patent by incorporating therein the teachings of the Bunge et al. patent. However, such a combination of references can only be made in view of the applicant's own disclosure.

Since claim 6 which is directed to a paint containing aluminum flake pigment and since claim 7 is directed to an ink containing aluminum flake pigment, and since both of these claims are dependent from claim 1, for the same reasons as argued here-in-above in connection with claim 1, it is also believed that claims 6 and 7 are patentably distinguishable over all of the references relied upon by the Examiner either alone or in combination.

Accordingly, in view of the above amendments and remarks reconsideration of the rejections and allowance of all the claims in the present application are respectfully requested.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Joseph A. Kolasch Reg. No. 22,463 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Application No. 10/527,270
Amendment dated December 20, 2006
Reply to Office Action of September 20, 2006

Docket No.: 0033-0988PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

By 

Joseph A. Kolasch

Registration No.: 22,463

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant